

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A data structure stored on a computer readable medium for a client tracking system, including:

a client tracking server object derived from a server class that provides an implementation of a query interface function that overrides the query interface function of the server class, wherein a phantom manager object is a data member of the client tracking server class, wherein a phantom server object is instantiated when the query interface function of the client tracking server class is invoked, wherein a class of the phantom server object is inherited from the server class, and wherein when a client object invokes a function of a phantom server object of the phantom server object, the function is custom processed by the phantom server object before forwarding the invocation of the function to the client tracking server object.

2. (Currently amended) A data structure stored on a computer readable medium for a client tracking system, including:

a client tracking server object derived from a server class that provides an implementation of a query interface function wherein if the query interface function invokes a second function according to convention, then the second function is overridden, wherein a phantom server class that includes functions that correspond to the functions of the server class and that have the same signature as the corresponding function of the server class is provided; wherein a phantom manager class that includes a create function for instantiating a phantom server object of the phantom server class and returns a reference to the phantom server object is provided; wherein a client tracking server class that is a derivation of the server class wherein the query function of the client tracking server class invokes the create function of the phantom manager class is provided; wherein a client tracking server object is instantiated; wherein the query function of the client tracking server object is invoked; wherein the query function invokes the create function of a phantom manager object which instantiates a phantom server object; wherein the query function returns a reference to the phantom server object.

3. (Original) A data structure according to claim 1, wherein the phantom manager class of the phantom manager object inherits from a base phantom manager class that includes at least one of (1) a phantom going away function that is invoked by a phantom server object to notify the phantom manager object that the phantom server object is being destructed, (2) a get object pointer function that returns a pointer to an embedding client tracking object, (3) a create function that is invoked by the query interface function of the client tracking server object to create a phantom server object, (4) a get phantom count function that returns the number of phantom server objects currently managed by the phantom manager object, (5) a create instance function that instantiates a phantom server object and that is invoked by the create function and (6) an instance going away function that is invoked by the phantom going away function.

4. (Original) A data structure according to claim 1, wherein the phantom manager class of the phantom manager object inherits from a base phantom manager class that includes at least one of (1) a my list pointer data member that provides a pointer to phantom server objects managed by the phantom manager object, (2) a my object pointer data member that provides a pointer to a client tracking server object in which the phantom manager object is embedded and (3) a my count data member that provides a count indicative of the number of phantom server objects managed by the phantom manager object.